

PTO/SB/08B (10-01)

Approved for use through 10/31/2002.OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

Complete if Known

Application Number	10/014,760
Filing Date	December 11, 2000
First Named Inventor	Kurt J. Richter
Group Art Unit	2121
Examiner Name	Not Yet Assigned
Attorney Docket Number	DO-049581/P02

RECEIVED

MAR 20 2002

Technology Center 2100

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
BWT	A	6,285,865	09-04-2001	Vorenkamp et al.	
	B	4,581,643	04-08-1986	Carlson	
	C	4,726,072	02-16-1988	Yamashita et al.	
	D	4,742,566	05-03-1988	Nordholt et al.	
	E	4,979,230	12-18-1990	Marz	
	F	5,038,404	08-06-1991	Marz	
	G	5,060,297	10-22-1991	Ma et al.	
	H	5,140,198	08-18-1992	Atherly et al.	
	I	5,200,826	04-06-1993	Seong	
	J	5,311,318	05-10-1994	Dobrovoly	
	K	5,321,852	06-14-1994	Seong	
	L	5,390,346	02-14-1995	Marz	
	M	5,428,836	06-27-1995	Sanecki et al.	
BWT	N	5,563,545	10-08-1996	Scheinberg	

RECEIVED
MAR 25 2002
TC 2800 MAIL ROOM

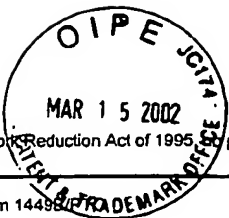
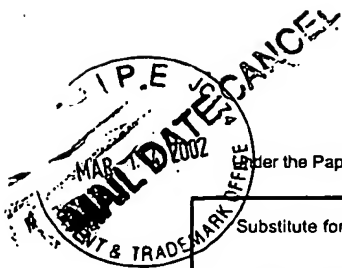
RECEIVED

APR 01 2002

Technology Center 2600

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
BWT	O	Meyer, Robert G. "A 1-GHz BiCMOS RF Front-End IC." IEEE Journal of Solid-State Circuits; Vol. 29 No. 3 (March 1994): 350-355.	
	P	Kinget, Peter and Michiel Steyaert. "A 1 GHz CMOS Upconversion Mixer". IEEE Custom Integrated Circuits Conference. (1996) 197-200.	
	Q	Crols, Jan, and Michel S. J. Steyaert. "A 1.5 GHz Highly Linear CMOS Downconversion Mixer." IEEE Journal of Solid-State Circuits. Vol. 30 No. 7 (July 1995). 736-742.	
	R	Kuhn, William B., William Stephenson, and Aicha Elshabini-Riad. "A 200 MHz CMOS Q-Enhanced LC Bandpass Filter." IEEE Journal of Solid-State Circuits. Vol. 31 No. 8 (August 1996). 1112-1122.	
	S	Okanobu, Taiwa, Hitoshi Tomiyama, and Hiroshi Arimoto. "Advanced Low Voltage Single Chip Radio IC." IEEE Transactions on Consumer Electronics. Vol. 38 No. 3. (August 1992) 465-475.	
	T	Crols, Jan, and Michiel Steyaert. "An Analog Integrated Polyphase Filter for a High Performance Low-IF Receiver." 1995 Symposium on VLSI Circuits Digest Of Technical Papers. (1995) 87-88.	
	U	Anadigics, Inc. CATV/TV/CABLE MODEM UPCONVERTER MMIC. Warren NJ (April 22, 1998).	
	V	Anadigics Inc. VHF/UHF CATV/TV Tuner Downconverter. Warren, NJ. (April 22, 1998).	
	W	Anadigics, Inc. Anadigics Technical Brief. Upconverter MMIC for CATV Preliminary. Warren, NJ. (January 11, 1994).	
	X	Archer, John, and John Granlund, and Robert E. Mauzy. "A Broad-Band UHF Mixer Exhibiting High Image Rejection over a Multidecade Baseband Frequency Range." IEEE Journal of Solid-State Circuits, Vol. SC-16 No. 4 (August 1981) 385-392.	
	Y	"Double-balanced mixer and oscillator" Phillips Semiconductors. (November 7, 1997). 1-11	
	Z	Gilbert, Barrie. "Demystifying the Mixer" Analog Devices Inc. (April 1994). 1-58.	
	AA	Scheinberg, N., et al. "A GaAs Up Converter Integrated Circuit for a Double Conversion Cable TV "Set-Top" Tuner" International Conference on Consumer Electronics. (June 1993). 108-109.	
	AB	Maier, G.M., et al. "Double Conversion Tuner a Must for the Future?" IEEE Transaction on Consumer Electronics, Vol. 38, No. 3. (August 1992). 384-388.	
	AC	Gilbert, Barrie and Baines, Rupert. "Fundamentals of Active Mixers" Applied Microwave and Wireless. (1995). 10-27.	
BWT	AD	Muller, J-E., et al. "A Double-Conversion Broad Band TV Tuner with GaAs ICs." GaAs IC	



PTO/SB/08B (10-01)

Approved for use through 10/31/2002.OMB 0651-0031

U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet	2	of	2
-------	---	----	---

Complete if Known

Application Number	10/014,760
Filing Date	December 11, 2000
First Named Inventor	Kurt J. Richter
Group Art Unit	2121
Examiner Name	Not Yet Assigned
Attorney Docket Number	DO-049581/PC

RECEIVED

MAR 20 2002

Technology Center 2100

BWT		Symposium Technical Digest. (1984). 97-98.	
	AE	Nakatsuka, T., et al. "Low Distortion and Low Noise Oscillator Mixer for CATV Converters." GaAs Symposium Technical Digest. (1988). 161-164.	
	AF	Brady, Vernon, et al. "Development of a Monolithic FET Ka-Band Single Side Band UConverter and Image Reject Downconverter." GaAs Symposium Technical Digest (October 1989) 189-192.	
	AG	Ablassmeier, Ulrich, et al. "GaAs FET Upconverter for TV Tuner" IEEE Transactions on Electron Devices, Vol ED-27, No. 6. (June 1980). 1156-1159.	
	AH	Maas, Stephen A. "A GaAs MESFET Mixer with Very Low Intermodulation" IEEE Transactions on Microwave Theory and Techniques, Vol. MTT-35, No. 4. (April 1987). 425-429.	
	AI	Pandula, Louis. "Image Rect and Image Canceling Mixers" RF Design. (April 1995). 60-65.	
	AJ	Svelto, F., et al. "A Low-Voltage Topology After CMOS RF Mixers." IEEE Transactions on Consumer Electronics., Vol. 45, No. 2 (May 1999). 299- 309.	
	AK	Gilbert, Barrie. "The MICROMIXER: A highly Linear Variant of the Gilbert Mixer using a Bisymmetric Class-AB Input Stage" IEEE Journal of Solid-State Circuits, Vol. 32, No. 9, (September 1997). 1412-1423.	
	AL	Ducourant, Thierry, et al. "A 3 Chip GaAs Double Conversion TV Tuner System with 70 db Image Rejection." Monolithic Circuits Symposium Digest of Papers. (1988). 87-90.	
	AM	Torji, K., et al. "monolithic Integrated VHF TV Tuner." IEEE Transactions on Consumer Electronics, Vol. CE-26. (May 1980). 180-189.	
	AN	MC13143: Ultra Low Power DC-2.4 GHz Linear Mixer: Motorola, Inc. Issue 2. (1996). 1-8.	
	AO	Maier, Gerd M. "New System Approach to TV Tuner Design." IEEE Transactions on Consumer Electronics, Vol. 36, No. 3. (August 1990). 403-406.	
	AP	McDonald, Mark D. "A 2.5GHz BiCMOS Image-Reject Front-End" IEEE International Solid-State Circuits Conference. (1993). 144-145.	
	AQ	Lovelace, David, et al. "Silicon Upconverter RF IC Simplifies Cable Modem Designs" Microwaves & RF (March 1997). 136-142.	
	AR	Farmer, James O. "Specifications for Tuner Design for use in Cable Ready Television Receivers and VCRs." IEEE Transactions on Consumer Electronics, Vol. 36, No. 3., (August 1990). 660-668.	
	AS	Abidi, Asad A. "Direct-Conversion Radio Transceivers for Digital Communications." IEEE International Solid-State Circuits Conference. (1995). 186-187; 363-364.	
	AT	Al-Hashimi, Bashir. "Understand the Fundamentals of Passive Video Filters." Microwaves & RF. (May 1996). 171-178.	
	AU	Crois, Jan and Michiel Steyaert. "A Fully integrated 900MHz CMOS Double Quadrature Downconverter" IEEE International Solid-State Circuits Conference. (1995). 136-137.	
	AV	Long, John R., et al. "A Low-Voltage Silicon Bipolar RF Front -End for PCN Receiver Applications." IEEE International Solid-State Circuits Conference. (1995). 104-105; 140-141.	
	AW	Sabin, William E. & Edgar O. Schoenike. "Single -Sideband Systems & Circuits." McGraw Hill Book Company. New York. (1987). 88-134, 181-213.	
	AX	"Opencable Set-top Terminal CORE Functional Requirement for Bi-directional Cable" Interim Specification, Cable Television Laboratories, Inc. 2000; pp.12-14	
	AY	"250 MHz QAM IF Downconverter" California Eastern Laboratories	
BWT	AZ	"A Dual-Channel QAM/QPSK Receiver IC with Integrated Cable Set-Top Box Functionality" Lionel D'Luna et al.; IEEE 1998 Custom Integrated Circuits Conference; pp. 351-352	

Examiner Signature	<i>Baryin Jap</i>	Date Considered	2/24/06
--------------------	-------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.





PTO/SB/08A (10-01)

Approved for use through 10/31/2002.OMB 0651-0031

U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/014,760	
			Filing Date	December 11, 2001	
			First Named Inventor	Kurt J. Richter	
			Art Unit	2121	
			Examiner Name	Not Yet Assigned	
Sheet	1	of	1	Attorney Docket Number	49581/P028US/10103789

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code* (if known)			
BWT	AA	US-6,081,697 A	06-27-2000	Haartsen	RECEIVED SEP 23 2003 Technology Center 2100
BWT	AB	US-6,314,279 B1	11-06-2001	Mohindra	
BWT	AC	US-4,115,737	12-19-1978	Hongu et al.	
BWT	AD	US-2001/0027095 A1	10-04-2001	Wang	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ² -Number ⁴ -Kind Code ⁵ (if known)				
BWT	BA	-EP 0 849 873 A1	06-24-1998	Plessey Semiconductors Limited		
BWT	BB	-EP 0 779 707 A1	06-18-1997	Thomson Consumer Electronics, Inc.		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
BWT	CA	International Search Report for PCT/US02/38886, September 12, 2003	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	2/24/06
-----------------------	--	--------------------	---------